**Unit 6 Lesson 3A - Rates and Unit Rates**

A **rate** is a special ratio where the quantities being compared have two different units of measurement. Some examples of rates are *miles per hour* and *beats per minute*.

1. Would 25 miles per gallon be considered a rate? Why or why not?

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Would 3 cats to 2 dogs be considered a rate? Why or why

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Example 1: You are in charge of buying soda for Dinner and a Movie. You want to get the most soda for the $50 budget. In order to determine the best buy, we can find the ratio of dollars per ounce.

|  |  |  |  |
| --- | --- | --- | --- |
| **Store** | **Price** | **Size** | **$ per oz** |
| Giant | $2.59 | 32 oz | $0.08 |
| 7-11 | $1.20 | 12 oz |  |
| Costco | $1.40 | 20 oz |  |

To find dollars per ounce, we need to find the **unit rate**. The **unit rate** is a rate that is simplified so that a number is being compared to 1. Decimals and fractions are allowed! The **unit rate** answers the question *How much for ONE of the other unit*?

In the example above, you find the unit rate by solving the problem:

$2.59 32 oz = $0.08/oz.

***Find the unit rate of soda at 7-11 and Costco and fill it in the box above.***

***Now solve the examples on the back of this sheet.***

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**Practice 1:**

Sarah took 3 minutes to run a distance of 540 meters. Ava took two minutes to run 480 meters. Who is faster? How do you know? *Hint: Figure out how far each could run in one minute to compare.*

**Practice 2:**

A skydiver falls 144 feet in 12 seconds. What is his unit rate of speed? *Remember speed = distance time*

**Practice 3:**

Sally earned $676 in 13 hours. What is her unit rate of pay?

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